Work Orde <i>May-27-13 12:4</i>							Page 1				
Revision ID:	D3953-9	ng Washer	A	Accept	*N9000	140	100)* .5	Setup Star	14	S1* S2*
	5/27/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item ID Customer:	:			- a		
Approvals:		s Plan: MLゴ	Date: 13-05-30	Tooling: SPC (Y/N):	Dat				Run Sta Sto	1/1	R1* R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr		Revision Nbr									
D3953		С									
100		The state of the s		0.00				****			
100 Hardinge Hardinge CNC Lath	e Small	Memo TURN AS P FOLIO REV DWG REV: DEBURR	ER FOLIO FA855 & DWG	0.00	E 13/06/0	4		<u>23</u>	<u>&</u>		
110		QC2- Inspect parts off m	achine FAI/FAIB	0.00							
110 QC Quality Control		Memo		0.00	F.K 13/06/	94	-	_23_	_		

											DQA.	Date	•
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORM	MANCE / UPE	DATE	QA Closed:	Date	
						DISPOSITION		r	·	AGAINST DE			•
Work Orde	er: _											_	-
Part No					Rework Skid-tube Scrap Machining Use-as-is Thermoforming			Machining	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other	
NCR No.				Use-as-is Thermoforming Finishing Work Order Update Large Fab Composite			~]	Supplier				
Root					Descri	ption of work order update		Initial	Act	ion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Descr	iption	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling]										
Operator				ļ									
Material	Ш												
Setup											1		
Other	Ш												
Process	Ш						1						
Supplier	Ш		j										
Training	Ш					•							
Unapproved													
		·					AUI	T CATE	GORY				
Landi	$\overline{}$	1				General		1		_	1	r- -	-
	Bending					Bend	<u>_</u>	Grain		<u> </u>	Ovalized	_	Pressure/Forced
					BOM/Route		Hardwa		<u> </u>	Over/Under		Temperature/Cure	
						Broken/Damaged	<u></u>	4	on Incomplete	<u> </u>	Part Incorred	├ ─	Weld
					Burrs	<u> </u>	4	ions Incomplete/U	Inclear	Part Lost/Mi	ssing	Wrong Stock Pulled	
		Cuffs			<u> -</u>	Contamination		Mainte			Part Moved		
	Heat Treat					Countersink	Mislabeled				Positioned V	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde May-27-13 12:4		2166		*102166*								
Revision ID:	D3953-9 Gas Spring W	acher		Accept	*N900	040	100)* s	etup Star Stop	i V	S1* S2*	
Start Date: Required Date: Reference:	5/27/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item I Customer:	D:				1 1	い	
Approvals:		nn:	Date:	Tooling: SPC (Y/N):		ıte:		R	tun Star Stop	VI "	R1* R2*	
Sequence ID/ Work Center II	D	Operation Description	<u> </u>	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
*120 *120* QC Quality Control		QC8- Inspect parts - seco	nd check	0.00 0.00	M 13/061	05		_23				
130 *130* Packaging Packaging		Identify as per dwg & Sto	ick Location:8767	0.00				23×			- St	
140 *1 4\O *		QC21- Final Inspection -	Work Order Release	0.00					13	16/1	1 6 10	

Quality Control

											DQA:	Date:	
NCR: Y	Yes	/ No				WORK ORDER NON-	CO	NFOR	MANCE / UP	DATE			
							,				QA Closed:	Date:	
Work Orde	Work Order:					DISPOSITION AGAINST DE					PARTMENT,	/PROCESS	
Work Orde	-''-	<u>-</u>				Rework	1		Skid-tube	Crosstube]	Water Jet	Engineering
Part N	No.					Scrap		1	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
NCR N	No.					Use-as-is Work Order Update		Thern	noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root					Descri	ption of work order update	T	Initial	Ac	tion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	CI	nief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data							1						
Equip/Tooling							ł						=
Operator	Ш												
Material	Ш												
Setup	Ш												
Other			ļ										
Process	Ш												
Supplier													
Training													
Unapproved				<u> </u>			<u> </u>						
FAULT CATEGORY													
Landir	ng G	Gear				General		٦.			7		•
	Ш	Bending			L	Bend	L	Grain			Ovalized		Pressure/Forced
		Centre N	ot Conce	ntric to	o/s	BOM/Route		Hardwa	are		Over/Under	tolerance	Temperature/Cure

Inspection Incomplete

Maintenance

Out of Calibration
Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Instructions Incomplete/Unclear

Part Incorrect

Part Moved

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Weld

Other

Wrong Stock Pulled

Broken/Damaged

Contamination

Countersink

Cut Too Short Drill Holes

Drawing

Finish Folio

Burrs

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Cracks

Cuffs

Heat Treat

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

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Picklist Print

May-27-13 12:40:32 PM

Work Order ID:

102166

Parent Item:

D3953-9

Parent Item Name:

Gas Spring Washer

Start Date: 5/27/13

Required Date: 5/27/13

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP RevA: New issue 09.10.13 DD verified by:EC 10.03.02 verified by:EC

IPP Rev:B as per dwg revC DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MDELRINR0.750 Delrin Round Bar 0.75"		Purchased	No			100	f	179.0480	0.05	1.052632			
				Location		Loc Oty	<u>Lo</u>	c Code					
				MAT018		179.048							
				11618	33	4.8							
				11727	73	4.665							
				11732	22	0.94							
				12178	33	27.49							
				12483	34	40						105	
				× 12495	57	101.153			10	1 2+ +	K- 1310	× 100	

Page 1

•												DQA:	Da	ite:	
NCR: Y	es /	No				WORK ORDER NON-C	10	NFORM	MANCE / UPI	DATE		_			
											C	QA Closed:	Da	te:	
Work Orde	, ė					DISPOSITION				AGAINST DE	EΡ	ARTMENT/	PROCESS		
WOIK OIGE						Rework			Skid-tube	Crosstube	7		Water Jet		Engineering
Part N	10.					Scrap			Machining	Small Fab					4 ~ ~ 4
	-					Use-as-is		Therm	noforming	Finishing		Rec/Store	e/Packaging		Other
NCR No.				Work Order Update			Large Fab	Composite			Supplier	L			
				1	5	Maria Carala and an and a har	لِـــ		Act	:	Ţ	Cian 9			1
Root				۵.		ption of work order update		Initial		_		Sign &	Varification	_	OC Increases
Cause	- -	ate	Step	Qty	(or Non-conformance	Ch	ief Eng	Descr	iption	╀	Date	Verificatio	n	QC Inspector
Doc/Data												ŀ	•		
Equip/Tooling						·									1
Operator			_												
Material	Д.										1				
Setup											ł				
Other	Ш														
Process	Ш	:			ļ				i	•					
Supplier															
Training															
Unapproved															
						F/	\UL	T CATE	GORY				· · · · · · · · · · · · · · · · · · ·		
Landi	ng Gea	r				General		7			_				1
	Ве	nding				Bend		Grain			-1	Ovalized			Pressure/Forced
	Centre Not Concentric to O/S BC			BOM/Route		Hardwa	re	<u></u>	Jo	Over/Under 1	tolerance	<u> </u>	Temperature/Cure		
	Cra	acks				Broken/Damaged	L	Inspecti	on Incomplete	L_	JP	Part Incorrec	t		Weld
Crushed/Crimped Burrs				Burrs		Instruct	ions Incomplete/U	Jnclear	JP	Part Lost/Mis	ssing	L	Wrong Stock Pulled		
	Cuffs Contamination				Contamination		Mainte	nance		JP	Part Moved				
	Heat Treat Countersink				Countersink		Mislabe	led		JP	Positioned W	/rong		_	
	Inspection Strip in Tube					Cut Too Short	Misread			P	Power Loss/S	Surge		Other	

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	102166
Description: Gas Spring Washer	Part Number:	D3953-9
Inspection Dwg: D3953 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

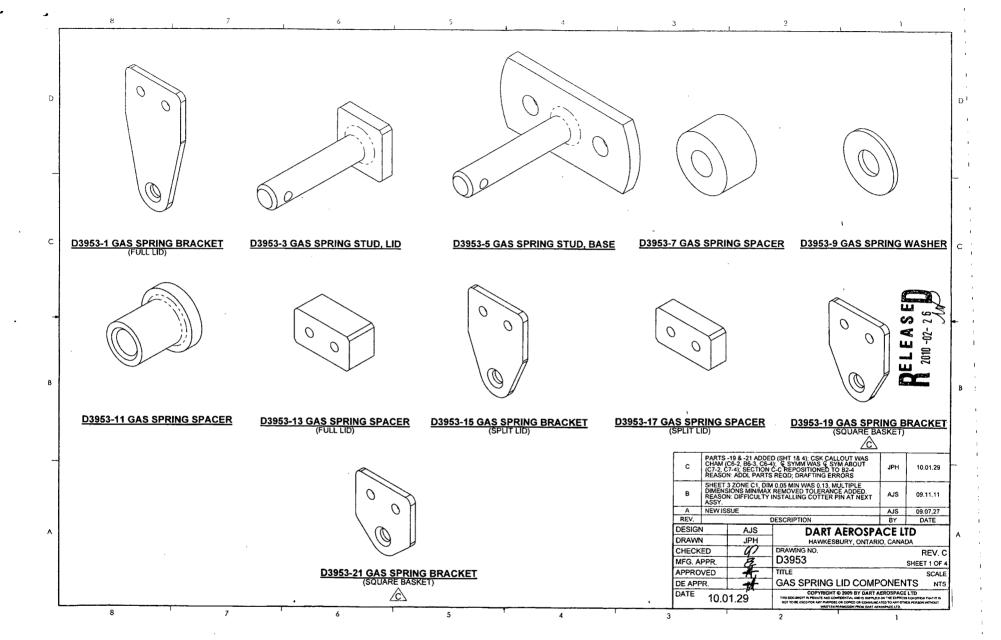
X	First Article		Prototype
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.63	+/-0.030	, Ce29			FK-04	Venn.
Ø0.257	+0.010/-0.001	s 257	7		1,	/1
0.05	+0.030/-0.000	,061	7		1.	٨
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					····· , <u>-</u>	

Measured by:	1.1 5-	Audited by:	oul	Prototype Approval:	N/A
Date:	13/06/04	Date:	13/06/05	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	09.10.22	New Issue	KJ 10	11
В	09.12.14	Dimension updated per Dwg Rev	KJ 😽	
			'71	



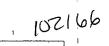
ENGINEERING

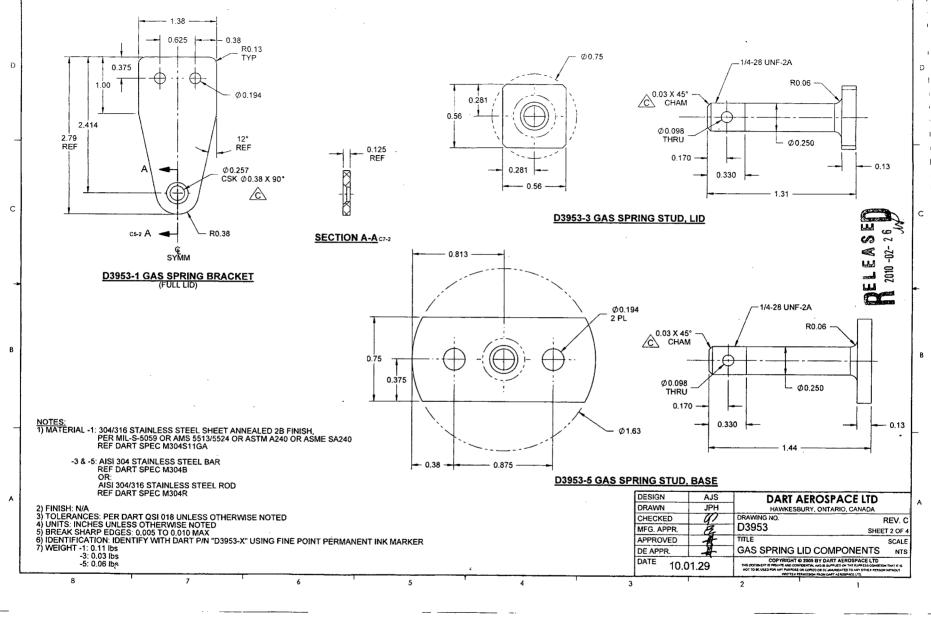
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TO AMENDMENT

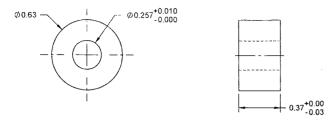
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NU-1-07-1-6-6-MLJ 13-05-30

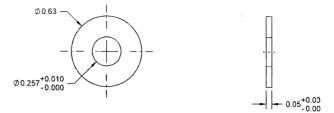




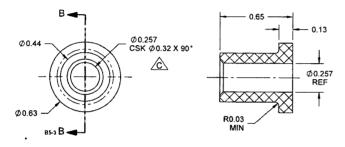
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D3953-7 GAS SPRING SPACER

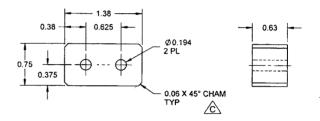


D3953-9 GAS SPRING WASHER



D3953-11 GAS SPRING SPACER

SECTION B-B B7-3



D3953-13 GAS SPRING SPACER

NOTES:	
1) MATERIAL -7,-9 & -11: DELRIN II 150E OR ACETRON GP ACETAL, BLAC	ж
REF DART SPEC M-DELRIN-R	

-13: AISI 304 STAINLESS STEEL BAR REF DART SPEC M304B

- 2) FINISH: N/A
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION -13 ONLY: IDENTIFY WITH DART P/N "D3953-13" USING FINE POINT PERMANENT INK MARKER
 7) WEIGHT -7/-9/-11: < 0.01 ibs EACH
 -13: 0.17 ibs

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JPH		
CHECKED	9	DRAWING NO.	REV. C
MFG. APPR.	E,	D3953 SHEET 3 O	
APPROVED	-47		SCALE
DE APPR.	#	GAS SPRING LID COMPONENTS	NTS
DATE 10.01.29		COPYRIGHT © 2009 BY DART AEROSPACE LTD THE DOCUMENT IS PREMITE AND CONTRIBUTION, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED THAT AIR THEFFEES ON CONTRIBUTED TO ANY OTHER PERSONNYMOUT	

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